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# Roommate Relationships: A Comparison of Interracial and Same-Race Living Situations

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The effects of same-race versus interracial dormitory roommate relationships were explored with regard to relationship dissolution and academic achievement (i.e., grade point average). The present investigation made use of archival data spanning two academic years at a large, relatively diverse university. Of primary interest were White and African American first-year students assigned to White or African American roommates upon their arrival on campus. Another factor that was incorporated into this analysis was whether students requested to live with their roommates or were randomly assigned. Interracial roommate relationships were more likely to dissolve than either same-race White or same-race African American relationships. Randomly assigned living situations were less successful than ones in which roommates requested to share a room. Concerning grade point average at the end of the first academic quarter, African American first-year students tended to do better in interracial living situations, whereas White first-year students' academic success was not affected by roommate race. Instead, White first-year students were more sensitive to the academic abilities of their roommates. Results are discussed with regard to the implications for intergroup contact.

**KEYWORDS** academic achievement, contact hypothesis, intergroup relations, roommate relationships

OVER the past few decades a great deal of research has focused on understanding prejudice, with hopes of illuminating how intergroup conflict might be reduced. One of the primary theories regarding prejudice reduction is the 'contact hypothesis' (Allport, 1954; Pettigrew, 1998). The underlying assumption of the theory is that increased interaction between members of different groups leads to a reduction in hostility and prejudice between the two groups (see Brewer & Brown, 1998; Pettigrew, 1998; Pettigrew &

Tropp, 2006, for reviews). The more contact between groups, the more the group members can learn about their similarities, rather than their differences, and disconfirm negative beliefs and feelings.

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Allport (1954) posited that four conditions were necessary to facilitate the success of intergroup contact: equal group status in the contact situation; intergroup cooperation; common goals; and the support of authorities, law, or custom. Further research suggests that two additional conditions promote intergroup contact. The first factor is the opportunity for personal interaction between the individual group members, which allows for self-disclosure and social comparison (Amir, 1976; Brewer & Miller, 1984; Miller, 2002). Through the sharing of intimate information, trust and familiarity are encouraged, and individuals are more likely to overcome perceived differences and see more similarity between one another. Second, the formation of friendships (Pettigrew, 1998) is a critical contributor to any positive change in prejudice that emerges from intergroup contact. For example, Pettigrew's (1997) structural equation analyses of cross-sectional data indicate that the path from friendship to reduced prejudice is stronger than the reverse path, that is, that from prejudice to fewer intergroup friends. Longitudinal research by Eller and Abrams (2004) further attests to the importance of friendship formation for beneficial intergroup contact. Thus, providing a situation in which interaction is intimate and friendships can easily form should increase the effectiveness of intergroup contact in reducing prejudice.

A real-world situation that meets most of the conditions indicated to benefit intergroup contact is a dormitory roommate relationship. In this situation, individuals are generally considered to be of equal status. It is a cooperative environment, and students have to work together to achieve a suitable living situation. The dormitory situation also provides a very intimate setting in which frequent and personal interactions may occur, while also providing an ideal opportunity for friendship to form. In addition, a dormitory relationship in which individuals are randomly assigned as roommates controls for concerns of self-selection (i.e., only low prejudice individuals seeking out intergroup contact) (Pettigrew, 1998).

Recent research by Van Laar, Levin, Sinclair, and Sidanius (2005) has taken advantage of the random pairing of roommates in college dorms to provide a truly experimental test of the contact hypothesis. Students were tracked over a five-year period, starting their first year of college. Those students who were placed in an interracial roommate relationship earlier in their academic career reported more positive affect toward Blacks, less symbolic racism, and more friendship heterogeneity. Thus, interracial dormitory relationships proved to be beneficial, supporting the contact hypothesis. Even more recent research has shown such benefits to extend beyond self-report measures. Compared with those assigned to a White roommate, Whites randomly assigned to a Black roommate displayed more automatically activated positivity on an implicit measure of racial attitudes (Shook & Fazio, 2008).

Presumably, a key contributor to these positive results is that the interracial relationships were successful and a positive experience. The students developed a satisfactory living situation and probably became friends, which led to the observed benefits. However, are such successful interracial relationships always to be expected? To the contrary, some research indicates that interracial dormitory relationships are less satisfying and more problematic than same-race dormitory relationships (Phelps et al., 1998; Towles-Schwen & Fazio, 2006). Phelps and colleagues (1998) found that White first-year students with an African American roommate believed that they were less compatible with their roommate than White first-year students randomly assigned to a White roommate. Towles-Schwen and Fazio (2006) found that White first-year students randomly assigned to an African American roommate spent less time together, were less socially involved with one another's networks, and were less likely to continue living with that roommate than White first-year students randomly assigned to another White first-year student. By the end of the first semester at college, 28% of the interracial roommate relationships had dissolved compared with 9%

of the same-race relationships. If interracial relationships quickly dissolve, or are viewed as incompatible, the likelihood of friendships forming would not be high. Thus, the potential benefits of contact may not come to fruition.

The goal of the present research was to extend previous work comparing interracial roommate relationships with those involving solely White roommates. First, we sought to develop a better understanding of the differential dissolution rates observed in previous research by including a same-race African American roommate comparison. Another novel contribution was to assess the effect of random assignment versus a requested roommate relationship on dissolution rates. Finally, we examined an additional outcome measure of same-race versus interracial dormitory roommate relationships—namely, the effect of roommate type on students' academic success.

It is important to note one key feature of the relatively greater dissolution rate that Towles-Schwen and Fazio (2006) observed among interracial roommate relationships. Their study focused on the differences between interracial living situations consisting of randomly paired White and African American roommates and same-race living situations consisting of two randomly paired White roommates. We wanted to extend these findings by including the comparison of same-race African American roommates. To specify and be confident that the higher dissolution of interracial roommate relationships stemmed from racial differences per se, both the same-race White and same-race African American comparisons are necessary. If the relatively greater failure of interracial roommate relationships is due to a lack of commonality and/or negative racial attitudes, then these interracial relationships should be characterized by a higher dissolution rate than is true for same-race African American relationships, just as has been documented relative to same-race White roommates. We expected to see results similar to those of Towles-Schwen and Fazio (2006) with interracial relationships dissolving more than same-race relationships, and we expected

the interracial roommates to be less successful than both the same-race White and same-race African American roommates.

Another unique aspect of the roommate relationship we were able to explore that had not been examined in the Towles-Schwen and Fazio (2006) research was the difference between roommates who were randomly assigned and those who requested to live with one another. We expected that relationships between roommates who requested to live with one another would be more successful than randomly assigned living situations. Presumably, the students who requested their roommates had an existing friendship (or expectation thereof) prior to entering the living situation. The question remains whether, within the requested rooms, a difference might exist between interracial and same-race rooms. Are two Whites, or two African Americans, who requested that they share a room more likely to succeed in doing so than a White and an African American who chose to live together? Given that friendship has been identified as such an important factor regarding the beneficial effects of intergroup contact on interracial attitudes (Pettigrew, 1998), we reasoned that pre-existing familiarity would prove paramount. In those cases, actual friendship is likely to exist, or have the potential to develop. The students would not have chosen to share a room if they did not expect a positive relationship. Hence, we did not expect dissolution of interracial rooms to differ from same-race rooms when the living arrangement had been requested.

A second consequence of the dormitory living situation we explored was the effect of roommate type on students' academic achievement, as assessed by grade point average (GPA). We expected to find differences in GPA between students in interracial and same-race rooms. Specifically, we hypothesized that African American students would benefit from the intergroup contact offered by the interracial roommate relationship. Much research indicates that African American students have a more difficult time adjusting to college life both socially

and academically (Allen, 1985; D'Augelli & Hershberger, 1993; Davis, 1994). A prominent explanation for this discrepancy is socio-economic factors (Chavous, Rivas, Green, & Helaire, 2002). However, another key factor for the adjustment of African American students to college, particularly at predominantly White institutions (PWIs), is interracial experience (Adan & Felner, 1995; Chavous et al., 2002; Graham, Baker, & Wapner, 1985). African American students from more ethnically diverse neighborhoods, high schools, and social networks typically display better adjustment to college life than students from less ethnically diverse environments. That is, they tend to fit in more and feel less alienated. Specifically, African Americans with greater pre-college exposure to Whites report more social satisfaction and comfort, greater attachment to the institution, and greater confidence in their academic abilities (Chavous et al., 2002; Graham et al., 1985). They also earned higher GPAs (Chavous et al., 2002; Davis, 1994). Presumably, their earlier intergroup contact better prepared them for the PWI environment and experiences.

Given that the present data stem from a predominantly White university, we hypothesized that African American students with a White roommate would have better GPAs than African American students in same-race rooms. Having a White roommate would allow for greater intergroup contact and may benefit the African American students to transition to a PWI culture. The smoother transition may be demonstrated in a higher GPA for African American students in interracial rooms, compared with same-race rooms, at the end of the first quarter at college. For the White first-year students, concerns of transitioning to a PWI do not arise, so we did not expect to find differences in GPA due to roommate type. However, as White students have previously reported being less satisfied and less happy in an interracial living situation (Phelps et al., 1998; Towles-Schwen & Fazio, 2006), this dissatisfaction may translate into a poorer GPA. White students may receive slightly lower GPAs in interracial rooms than same-race rooms, to the extent that any greater malaise

experienced by those in the interracial situation adversely affects their academic performance.

## **Method**

The University Office of Residence Life provided archival data for first-year students living in dorms during the 2001 and 2002 academic school years. The databases included information regarding dormitory room assignments at the beginning and end of the autumn quarter, student ethnicity, gender,<sup>1</sup> whether students requested their roommates, students' SAT or ACT scores, and students' autumn quarter GPA. Based on this information, each room was coded as to how many students resided in the room,<sup>2</sup> the ethnic make-up of the room, and whether students were randomly assigned to the room or requested to live with each other. Success of each roommate relationship was determined by whether students were still living together at the end of the autumn quarter (i.e., three months later). During the specific years of interest, the university was experiencing a housing shortage. As such, it was difficult for students to receive a room change during the academic term. Students were encouraged to try to 'work out' differences with their roommates and had to be able to demonstrate these efforts before a room change would be considered. Due to these situational constraints, we expected dissolution rates to be lower than found in previous research (Towles-Schwen & Fazio, 2006). However, with the benefit of the large archival sample, we still expected to find differences between same-race and interracial rooms.

For the purposes of this project, we were only interested in rooms housing first-year students and the comparison between African American and White students. Thus, all analyses were performed on rooms consisting only of first-year students, who were either White or African American. Same-race rooms consisted of rooms housing only African American first-year students or rooms housing only White first-year students. Interracial living situations consisted of a combination of White and African American first-year students.

## Results

### *Archival data description*

In all, there were 2744 rooms that fit the requirements of this project. Of those rooms, 1886 were randomly assigned rooms and 858 were requested rooms. With regard to roommate type, 2271 rooms were same-race White; 332 rooms were interracial; and 141 rooms were same-race African American. Of the same-race White rooms, 1531 (67.4%) were randomly assigned and 740 (32.6%) were requested. Of the interracial rooms, 287 (86.4%) were randomly assigned and 45 (13.6%) were requested. Of the same-race African American rooms, 68 (48.2%) were randomly assigned and 73 (51.8%) were requested. Interestingly, the proportion of interracial rooms that were requested (13.6%) was significantly smaller than was the case for either same-race White rooms (32.6%), Fisher's exact  $p < .001$ , or same-race African American rooms (51.8%), Fisher's exact  $p < .001$ . In fact, the proportion of requested same-race African American rooms was significantly larger than requested same-race White rooms, Fisher's exact  $p < .001$ .

### *Roommate relationship dissolution*

Our main interest with respect to the matter of relationship dissolution was to determine whether interracial roommate situations were more likely to dissolve than same-race White relationships, as had been previously found (Towles-Schwen & Fazio, 2006), and same-race African American relationships. To examine relationship dissolution, each room was coded as either 0 (no change in room) or 1 (one of the roommates had changed rooms). Binary logistic regression was conducted with this measure as the dependent variable. Roommate Type (interracial, same-race White, or same-race African American) and Room Assignment (random or requested) were entered as categorical covariates (step 1) and the interaction term Roommate Type  $\times$  Room Assignment was also included (step 2). The effect of Roommate Type was significant, Wald's  $\chi^2(2, N = 2744) = 9.85, p = .01$ . Overall, 50 of the 332 (15.1%) interracial roommate relationships had experienced change in the living situation

by the end of the autumn quarter compared with 183 of the 2271 (8.1%) same-race White roommate relationships, Fisher's exact  $p < .001$ . Of the same-race African American rooms, 9 of 141 (6.4%) had dissolved by the end of the quarter, which was significantly fewer than the interracial rooms, Fisher's exact  $p < .01$ . There was not a significant difference in the success of the same-race White and same-race African American roommates, Fisher's exact  $p > .30$ . In general, first-year students assigned to an interracial roommate situation were less likely to remain living in that room by the end of the first quarter compared with same-race White and same-race African American roommate assignments.

There was also a significant effect of the Room Assignment variable, Wald's  $\chi^2(1, N = 2744) = 36.12, p < .001$ . Of the randomly assigned rooms, 213 of the 1886 (11.3%) rooms had dissolved by the end of the quarter compared with 29 of the 858 (3.4%) requested rooms. Thus, the randomly assigned rooms were much less successful than the requested rooms.

The interaction between Roommate Type and Room Assignment was not significant,  $p > .80$ . However, to more appropriately compare our results regarding roommate relationship success with Towles-Schwen and Fazio's (2006) findings, and to take advantage of the causal inferences permitted by random assignment, we examined the differences in dissolution between Roommate Type within the two levels of the Room Assignment variable. For randomly assigned rooms, Roommate Type was a significant factor, Wald's  $\chi^2(2, N = 1886) = 8.74, p < .02$ . That is, 47 of the 287 (16.4%) interracial roommates<sup>3</sup> had experienced a change in their living situation by the end of the autumn quarter compared with 160 of the 1531 (10.5%) same-race White roommate relationships, Fisher's exact  $p < .01$ . Of the same-race African American rooms, 6 of 68 (8.8%) had dissolved by the end of the quarter—a rate that differed at a marginally significant level from the dissolution rate observed for the interracial rooms, Fisher's exact  $p < .08$ . There was no significant difference in the success of the same-race White and same-race African American rooms, Fisher's exact  $p > .40$ . For the

requested assignment rooms, there were no differences in success between the three different types of rooms, Fisher's exact  $ps > .20$ . Thus, interracial roommate relationships were more likely to dissolve than same-race relationships and this pattern was especially apparent when the analysis was restricted to rooms in which the roommates had been randomly assigned (see Figure 1).

**Student academic success**

To assess student academic success, the unit of analysis was the student instead of the room, and students' autumn quarter GPAs were considered. Our primary interest concerned the effects of Roommate Type and Room Assignment. However, two additional variables were incorporated into the analyses as we reasoned that they could influence academic success. First, students' GPAs should be influenced by their academic ability and preparedness for college, so we included students' standardized test scores. Students had completed either the SAT or ACT exams

before entering college. To create a single variable, SAT and ACT scores were separately standardized, and these z-scores were employed to represent each student's academic ability. Second, students' academic performance might also be affected by their roommates' academic abilities. If students turn to their roommates for help with their schoolwork, or even simply serve as models to one another, those who are assigned to a more academically successful student may benefit more than those assigned to a less successful student.<sup>4</sup> Thus, a hierarchical regression analysis was conducted predicting autumn quarter GPA from student's own race, roommate's race, room assignment (random or requested), student's standardized exam score, roommate's standardized exam score, and their associated interaction terms.<sup>5</sup>

As shown in Table 1, the regression revealed a main effect of student's own race with White students earning higher GPAs than African American students. There was also a main effect of student's standardized exam such

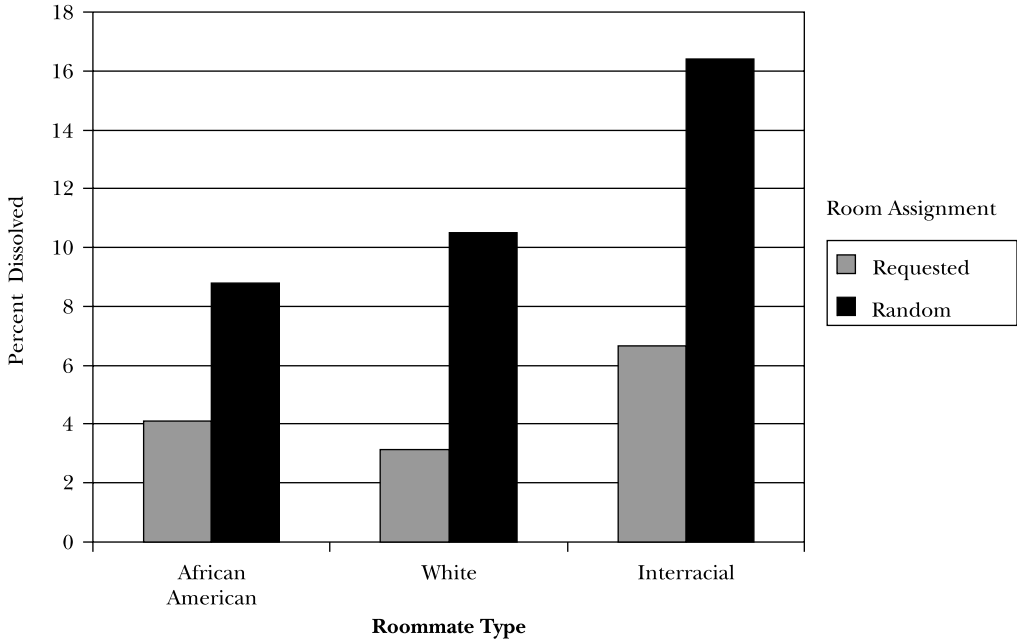


Figure 1. Percent of roommate relationships that dissolved within the autumn quarter as a function of roommate type and room assignment.

that students with higher test scores earned higher GPAs. There were also a number of significant three- and four-way interactions. The two significant four-way interactions (Room Assignment  $\times$  Student's Race  $\times$  Roommate's Race  $\times$  Roommate's Standardized Exam and Room Assignment  $\times$  Roommate's Race  $\times$  Student's Standardized Exam  $\times$  Roommate's Standardized Exam) both involved the room assignment variable. Hence, to guide interpretation of the interactions, regression analyses were conducted

separately on students in randomly assigned versus requested rooms.

For students who requested their roommates, there was an effect of student's standardized exam ( $b = .15$ ) ( $t(1362) = 3.32, p = .001$ ). Students with higher standardized test scores earned higher autumn quarter GPAs. Race and roommate's academic abilities did not affect the academic success of students in requested rooms, all  $t$ s  $< 1$ .

In randomly assigned rooms, the main effect of student's own race emerged ( $b = .20$ ),

Table 1. Summary of regression analysis for variables predicting autumn GPA ( $N = 4000$ )

Variable	<i>M</i>	<i>SD</i>	<i>B</i>	<i>t</i>	$\Delta R^2$
Step 1					
Room Assignment (RA)	.34	.47	.05	1.57	.03**
Student's Race (R)	.90	.30	.14	2.30*	
Roommate's Race (RR)	.90	.30	-.02	-.34	
Student's Standardized Exam (SSE)	-.05	.96	.14	7.34**	
Roommate's Standardized Exam (RSE)	-.06	.96	.03	1.51	
Step 2					
RA $\times$ R	.31	.46	-.22	-1.49	.004
RA $\times$ RR	.31	.46	-.06	-.44	
RA $\times$ SSE	-.04	.55	.02	.40	
RA $\times$ RSE	-.05	.56	.01	.24	
R $\times$ RR	.85	.36	.09	.56	
R $\times$ SSE	.07	.82	-.07	-1.15	
R $\times$ RSE	.02	.87	-.12	-1.71	
RR $\times$ SSE	.02	.86	.09	1.32	
RR $\times$ RSE	.07	.83	-.07	-1.15	
SSE $\times$ RSE	.42	1.14	.01	.50	
Step 3					
RA $\times$ R $\times$ RR	.30	.46	1.23	3.43**	.01**
RA $\times$ R $\times$ SSE	.00	.47	.04	.23	
RA $\times$ R $\times$ RSE	-.01	.49	-.19	-1.16	
RA $\times$ RR $\times$ SSE	-.01	.48	-.12	-.73	
RA $\times$ RR $\times$ RSE	.00	.48	-.29	-1.86	
RA $\times$ SSE $\times$ RSE	.15	.72	-.02	-.63	
R $\times$ RR $\times$ SSE	.07	.80	-.05	-.35	
R $\times$ RR $\times$ RSE	.07	.80	-.06	-.41	
R $\times$ SSE $\times$ RSE	.30	.94	.08	1.24	
RR $\times$ SSE $\times$ RSE	.30	.94	.05	.82	
Step 4					
RA $\times$ R $\times$ RR $\times$ SSE	.00	.46	.62	1.75	.003*
RA $\times$ R $\times$ RR $\times$ RSE	.00	.47	.72	2.01*	
RA $\times$ R $\times$ SSE $\times$ RSE	.09	.54	.04	.18	
RA $\times$ RR $\times$ SSE $\times$ RSE	.09	.54	-.37	-1.96*	
R $\times$ RR $\times$ SSE $\times$ RSE	.28	.90	-.03	-.21	
Step 5					
RA $\times$ R $\times$ RR $\times$ SSE $\times$ RSE	.09	.52	.59	1.47	.001

\* $p < .05$ ; \*\* $p < .001$ .



$t(2628) = 3.81, p < .001$ , with White students earning higher GPAs than African American students. There was also a main effect of student's standardized exam ( $b = .13$ ),  $t(2628) = 7.72, p < .001$ , such that students with higher standardized test scores earned higher GPAs. Of more interest, however, was an interaction between student's race and the randomly assigned variable of roommate's race ( $b = -.30$ ),  $t(2622) = 2.10, p < .04$ . The interaction is displayed in Figure 2. For White students, the race of their roommate did not affect their GPA. However, African American students attained higher GPAs when assigned to a White roommate than an African American roommate.

To further explore the significant Room Assignment  $\times$  Student's Race  $\times$  Roommate's Race  $\times$  Roommate's Standardized Exam four-way interaction, the sample was split by student's race and hierarchical regression analyses were conducted with roommate's race, student's standardized exam, roommate's standardized exam, and their associated interactions. For African American students, the effect of student's

standardized exam was significant ( $b = .16$ ),  $t(270) = 2.96, p < .01$ . There was also a significant interaction between roommate race and student's standardized exam ( $b = .31$ ),  $t(267) = 2.67, p = .01$ . For African American students with lower standardized test scores, roommate race did not affect GPA. However, for African American students with higher standardized test scores, those who were randomly assigned to a White roommate attained higher GPAs (see Figure 3). Thus, an interracial roommate relationship was beneficial for some African American first-year students.

For White students, the effect of student's standardized exam was significant ( $b = .13$ ),  $t(2355) = 7.10, p < .001$ . There was also an interaction between student's standardized exam and roommate's standardized exam ( $b = .03$ ),  $t(2352) = 2.09, p < .04$ . For White students with low standardized test scores, their roommates' academic abilities did not matter. However, students with high standardized test scores received higher GPAs when randomly assigned to roommates with higher standardized

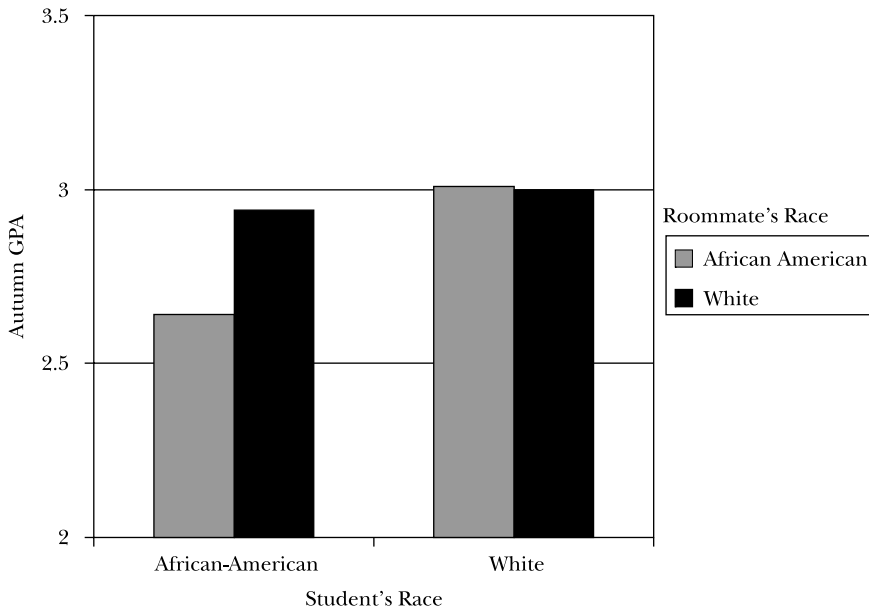


Figure 2. Autumn GPA as a function of student's own race and roommate's race (controlling for the students' standardized exam scores), among those randomly assigned.

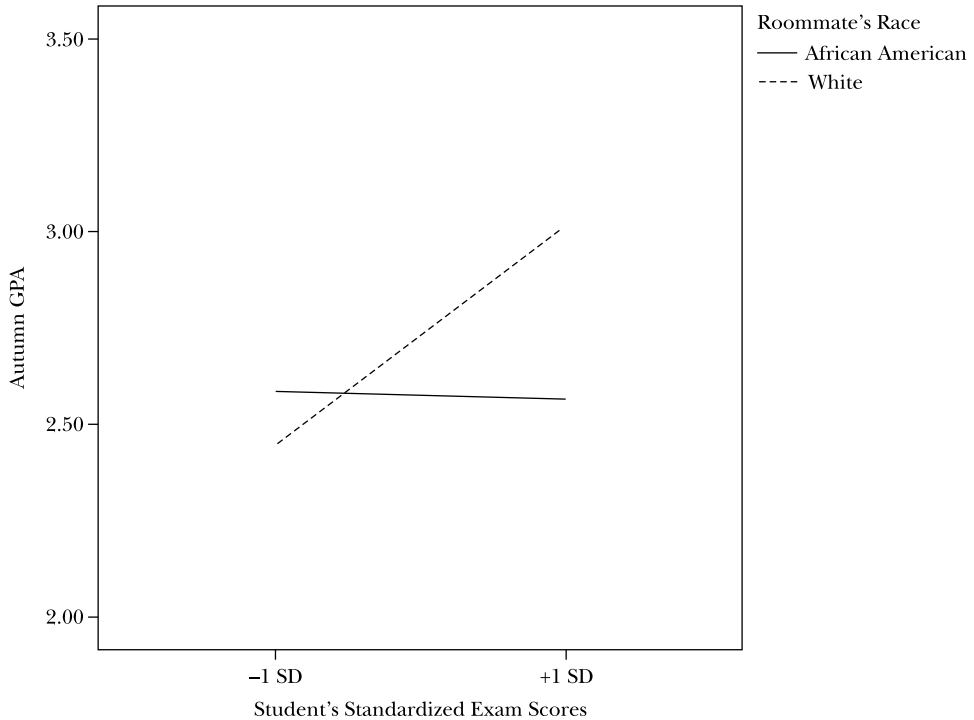


Figure 3. African American first-year students' autumn GPA as a function of roommate's race and student's standardized exam scores at values one standard deviation above and below the mean.

test scores. Thus, the academic success of the White first-year students was influenced more by the academic abilities of their roommates, not the race of their roommates.

## Discussion

The purpose of the present research was to explore the consequences of intergroup contact for dormitory roommate relationships. Specifically, we were interested in the differences in roommate relationship dissolution and academic success between first-year students in an interracial versus a same-race living situation. The results of the research suggest that interracial roommate relationships are less likely to be sought out and, when initiated as a consequence of random assignment, are less likely to remain intact than both same-race White and same-race African American roommate relationships. Interracial roommate

relationships were more likely to have dissolved by the end of the first quarter at college than same-race rooms, and there was no difference in the success of same-race White or African American rooms. The difference between the success of the same-race and interracial living situation is possibly due to the anxiety (Pettigrew, 1998), lack of perceived commonality (Phelps et al., 1998), and/or inappropriate racial attitudes (Towles-Schwen & Fazio, 2006) that are more likely to be experienced in an interracial living situation. Interestingly, of the dissolved interracial roommate relationships, there was no difference in the likelihood of an African American or White roommate leaving the situation, which would imply that the discomfort or dissatisfaction with the living situation was equivalent across cases.

The differences in room dissolution were more prominent in randomly assigned rooms than requested room assignments, which raises

two points. First, those who were randomly assigned to an interracial living situation and left before the end of the quarter most likely did not benefit from the intergroup contact. These individuals chose to remove themselves from the situation rather than learn and cooperate to make the living situation work. Although we do not have direct, self-reported measures of attitudes in the present study, it seems likely that their attitudes toward the other group did not improve and may actually have become more negative. This possibility highlights the importance of keeping an individual engaged in the interaction as opposed to seeking an escape. Second, the greater success of the requested interracial living situations demonstrates the importance of friendship for intergroup contact. If an individual is motivated and open to the intergroup contact, the benefits are apparent. Having a pre-existing friendship (or the expectation of a friendship) before sharing a dormitory room greatly increased the success of relationships, to the point that there was not a significant difference in the success of interracial versus same-race living situations.

The second consequence of roommate type that we explored was academic success. Random assignment to an interracial living situation seemed to affect students' quarterly GPA, with African American students receiving higher GPAs. Specifically, African American students with higher standardized test scores tended to attain higher GPAs when randomly assigned to White roommates rather than African American roommates. For White first-year students, their roommates' race did not affect their academic success. Instead, White first-year students' GPAs were more influenced by their roommates' academic abilities. Specifically, White first-year students who were more academically successful prior to college attained higher GPAs if assigned to similarly successful roommates. It should be noted that the comparisons regarding roommate race allow for causal inference as students were randomly assigned to their roommates.

Based on these results, it seems that the African American first-year students randomly assigned to White roommates may be benefiting from the intergroup contact. Previous research has

demonstrated that African Americans who had experienced more intergroup contact before college adjusted better to a predominantly White university (Adan & Felner, 1995; Chavous et al., 2002; Graham et al., 1985). Having a White roommate may serve the same purpose for an African American first-year student. From the interactions with their White roommates, these students may get a better understanding of the expectations and norms of the university environment. This may be particularly beneficial for the African American students who were more academically successful prior to college. That is, those who entered college better prepared and able to cope with the curriculum may have excelled with the addition of exposure to a White roommate and the gain of a model of what is expected at a predominantly White university. Thus, these students may have experienced a more successful and easier transition to college life which translated into higher GPAs.

Assignment to an interracial living situation may also benefit the African American students by increasing their sense of belonging. Recent work by Walton and Cohen (2007) demonstrated that African American students' academic satisfaction and academic success are affected by their sense of belonging. In two experiments, they found that African American students who experienced more belonging uncertainty, or less social connectedness in their academic setting, reported less academic fit, believed that they had less potential to succeed, and received lower GPAs (Walton & Cohen, 2007). Due to this greater sensitivity to belonging, African American students at a predominantly White university may gain from an interracial roommate relationship. Having a White roommate may provide a better sense of connectedness and belonging in their academic setting, which may not result from a same-race African American roommate relationship. Thus, the higher GPAs for African American students in interracial living situations may be a benefit of intergroup contact.

The relatively greater academic success of African Americans in interracial living situations may have implications for long-term

academic success and sense of belonging at a predominantly White university. That is, the more positive experience for students in the interracial living situations during their first quarter at university may set the tone for the rest of their academic careers. The potentially easier transition to college life and greater academic success may encourage future success and a stronger sense of belonging. Moreover, these early positive experiences may have consequences for racial attitudes. The presumably positive roommate experience and easier adjustment to a predominantly White environment may translate into more positive evaluations of the entire outgroup.

Overall, the present archival data demonstrate that interracial dormitory roommate relationships are more likely to be problematic than same-race relationships. However, it should be noted that despite the higher likelihood of dissolution, the majority of the interracial roommate relationships were still intact at the end of the autumn quarter. Additionally, intergroup contact may benefit individuals by aiding their adjustment to a new predominantly White institution, translating into better academic performance. Although we did not find specific benefits for the White students in interracial living situations, we did not find any detriments due to the room type. Also, previous research has found improvements in White students' automatically activated racial attitudes and reduction in intergroup anxiety when they had been randomly assigned to an interracial versus a same-race living situation (Shook & Fazio, 2008). Importantly, this finding stemmed from a housing situation that allowed for very limited room change during the first academic quarter, thus encouraging students to 'work out' the relationship as best they could. Under these conditions of prolonged contact, the White students came to display more favorable racial attitudes and less intergroup anxiety. Thus, overall, interracial roommate relationships seem beneficial to both majority and minority students.

### *Limitations and future directions*

As the data are archival, there are several limitations. We do not have access to students'

subjective experiences in the living situations or in their new college environment. From the dataset, we cannot determine how the roommate relationships developed and what specific relationship factors may have contributed to the success of the living situation or students' autumn quarter GPAs. We are also limited as to the background information we have about the students. For example, information about students' previous exposure to intergroup contact could add to our understanding of the basic findings. Focusing on the randomly assigned rooms does control for some of these shortcomings and allow for causal inference. However, interpretation of the results and discussion of underlying mechanisms are necessarily speculative.

Future work should focus on the actual roommate relationships and examine students' evaluations and subjective reports of the individual living situation. By determining the factors that facilitate or hinder the success of interracial living situations, the likelihood of positive intergroup contact within dormitories can be increased. Factors such as social involvement, perceived commonality, and time spent together may be influential in determining whether a relationship succeeds and, in turn, may have broader implications for improvement of racial attitudes.

The current research also focused only on the first quarter of college. Particularly with regard to academic success, it is unknown whether the differences would persist beyond the autumn quarter, and if so, for how long. Similarly, it might be useful to examine the effect of the roommate relationship quality on academic success. Extending the time will help determine the extent to which the effect of the initial living situation on academic performance generalizes over time and potentially across later changes in living situations. Particularly with concerns about academic performance and retention, understanding the impact of the first year roommate relationship may be very important. Satisfaction with the initial living situation and support from the roommate may be significant for transitioning to college life and succeeding academically.

## Conclusions

The present research highlights some of the consequences, positive and negative, associated with interracial interactions in a dormitory relationship. Specifically, the work demonstrates that positive intergroup contact cannot always be expected. Especially noteworthy is the finding that students randomly assigned to an interracial living situation were characterized by a higher rate of relationship dissolution than was true for students randomly assigned to a same-race situation. A more positive outcome was apparent with respect to academic achievement. African American students assigned to interracial roommate relationships performed better academically, possibly because the interracial living situation facilitated their transition to a predominantly White university. In sum, the current findings add to our understanding of the consequences of intergroup contact in an extended, real-world situation.

## Notes

1. Within the data set, there were 1335 male rooms and 1409 female rooms. Initially, gender was included in the roommate dissolution analyses. However, there were no significant main effects or interactions,  $ps > .15$ . As such, analyses are reported collapsed across gender.
2. The majority of the rooms in the dataset that met the specific requirements were dyadic (80.3%). However, there were 541 rooms with three or four roommates that met the inclusion criteria. To determine whether these rooms should be included in the roommate dissolution analyses, rooms were coded as either dyadic or larger (i.e., three or four roommates). When this variable was included in the logistic regression equations, a significant effect of room size was evident, Wald's  $\chi^2(1, N = 2744) = 8.41, p < .01$ . Of the dyads, 169 of the 2203 (7.7%) had dissolved by the end of the quarter. By contrast, one (or more) persons moved out in 73 of the 541 (13.5%) rooms consisting of three or four roommates. However, the Room Size variable did not interact with Roommate Type or Room Assignment,  $ps > .22$ . Thus, to ease presentation of analysis and maintain the focus of the article, the reported analyses collapsed across Room Size.

3. With the greater dissolution of interracial relationships, we also explored whether the White or the African American roommates were more likely to leave the room. Of the randomly assigned interracial rooms, 54 of the 307 (17.6%) African American roommates left the living situations and 73 of the 420 (17.4%) White roommates left. Thus, there was no difference due to race in who left the interracial rooms, Fisher's exact  $p > .50$ .
4. Given our interest in the roommate's aptitude, the analyses were limited to those students residing in double rooms.
5. The academic success analyses were also conducted using hierarchical linear modeling (HLM) to account for the fact that the individual students were nested within roommate pairs. The HLM analyses yielded similar results to the regression analyses. That is, the significant main effects and interactions found in the regression analyses were also significant or marginally significant in the HLM analyses,  $ps < .08$ . Only the marginally significant interaction between Student's Race and Roommate's Standardized Exam (see Table 1) was not evident in the HLM analysis. For ease of presentation, the regression analyses are featured in the results section.

## References

- Adan, A., & Felner, R. D. (1995). Ecological congruence and adaptation of minority youth during the transition to college. *Journal of Community Psychology, 23*, 256–269.
- Allen, W. R. (1985). Black student, White campus: Structural, interpersonal, and psychological correlates of success. *Journal of Negro Education, 54*, 134–147.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Amir, Y. (1976). The role of intergroup contact in change of prejudice and race relations. In P. A. Katz (Ed.), *Towards the elimination of racism* (pp. 245–280). New York: Pergamon.
- Brewer, M. B., & Brown, R. J. (1998). Intergroup relations. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 2, pp. 554–594). Boston, MA: McGraw-Hill.
- Brewer, M. B., & Miller, N. (1984). Beyond the contact hypothesis: Theoretical perspectives on desegregation. In N. Miller & M. B. Brewer (Eds.), *Groups in contact: The psychology of*

- desegregation* (pp. 281–302). Orlando FL: Academic Press.
- Chavous, T., Rivas, D., Green, L., & Helaire, L. (2002). Role of student background, perceptions of ethnic fit, and racial identification in the academic adjustment of African American students at a predominantly White university. *Journal of Black Psychology, 28*, 234–260.
- D'Augelli, A. R., & Hershberger, S. L. (1993). African American undergraduates on a predominantly White campus: Academic factors, social networks, and campus climate. *Journal of Negro Education, 62*, 67–81.
- Davis, J. E. (1994). College in Black and White: Campus environment and academic achievement of African American males. *Journal of Negro Education, 63*, 620–633.
- Eller, A., & Abrams, D. (2004). Come together: Longitudinal comparisons of Pettigrew's reformulated intergroup contact model and Common Ingroup Identity Model in Anglo-French and Mexican-American contexts. *European Journal of Social Psychology, 34*, 229–256.
- Graham, C., Baker, R. W., & Wapner, S. (1985). Prior interracial experience and Black student transition into predominantly White colleges. *Journal of Personality and Social Psychology, 47*, 1146–1154.
- Miller, N. (2002). Personalization and the promise of contact theory. *Journal of Social Issues, 58*, 387–410.
- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality & Social Psychology Bulletin, 23*, 173–185.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49*, 65–85.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*, 751–783.
- Phelps, R. E., Altschul, D. B., Wisenbaker, J. M., Day, J. F., Cooper, D., & Potter, C. G. (1998). Roommate satisfaction and ethnic identity in mixed-race and white university roommate dyads. *Journal of College Student Development, 39*, 194–203.
- Shook, N. J., & Fazio, R. H. (2008). Interracial roommate relationships: An experimental test of the contact hypothesis. *Psychological Science, 19*, 717–723.
- Towles-Schwen, T., & Fazio, R. H. (2006). Automatically-activated racial attitudes as predictors of the success of interracial roommate relationships. *Journal of Experimental Social Psychology, 42*, 698–705.
- Van Laar, C., Levin, S., Sinclair, S., & Sidanius, J. (2005). The effect of university roommate contact on ethnic attitudes and behavior. *Journal of Experimental Social Psychology, 41*, 329–345.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology, 92*, 82–96.

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